



SEQUENCE LISTING

<110> Koichiro KAKU et al.

<120> GENE CODING FOR SCYTALONE DEHYDRATASE EXHIBITING RESISTANCE TO AGRICULTURAL FUNGICIDAL AGENT

<130> 1254-0258PUS1

<140> US 10/507,132

<141> 2004-09-10

<150> JP 2002-66955

<151> 2002-03-12

<160> 19

<170> PatentIn Ver. 2.1

<210> 1

<211> 516

<212> DNA

<213> Pyricularia oryzae

<220>

<221> CDS

<222> (1)..(516)

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ctg ggc ctc atg act tgc gtc tat gag tgg gca gac agc tac gac tcc	96
Leu Gly Leu Met Thr Cys Val Tyr Glu Trp Ala Asp Ser Tyr Asp Ser	
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aag gac tgg gat agg ctg cga aag gtc att gcg cct act ctg cgc att	144
Lys Asp Trp Asp Arg Leu Arg Lys Val Ile Ala Pro Thr Leu Arg Ile	
35 40 45	
gac tac cgc tcc ttc ctc gac aag ctc tgg gag gca atg ccg gcc gag	192
Asp Tyr Arg Ser Phe Leu Asp Lys Leu Trp Glu Ala Met Pro Ala Glu	
50 55 60	
gag ttc gtc ggc atg gtc tcg agc aag cag atg ctg ggc gac ccc acc	240
Glu Phe Val Gly Met Val Ser Ser Lys Gln Met Leu Gly Asp Pro Thr	
65 70 75 80	
ctc cgc acg cag cac ttc atc ggc ggc acg cgc tgg gag aag gtg tcc	288
Leu Arg Thr Gln His Phe Ile Gly Gly Thr Arg Trp Glu Lys Val Ser	
85 90 95	
gag gac gag gtc atc ggc tac cac cag ctg cgc gtc ccg cac cag agg	336
Glu Asp Glu Val Ile Gly Tyr His Gln Leu Arg Val Pro His Gln Arg	
100 105 110	

tac aag gac acc acc atg aag gag gtc acc atg aag ggc cac gcc cac 384
Tyr Lys Asp Thr Thr Met Lys Glu Val Thr Met Lys Gly His Ala His
115 120 125

tcg gca aac ctt cac tgg tac aag aag atc gac ggc gtc tgg aag ttc 432
Ser Ala Asn Leu His Trp Tyr Lys Lys Ile Asp Gly Val Trp Lys Phe
130 135 140

gcc ggc ctc aag ccc gat atc cgc tgg ggc gag ttc gac ttt gac agg 480
Ala Gly Leu Lys Pro Asp Ile Arg Trp Gly Glu Phe Asp Phe Asp Arg
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atc ttt gag gac gga cgg gag acc ttt ggc gac aaa 516
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<211> 172

<212> PRT

<213> Pyricularia oryzae

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20 25 30

Lys Asp Trp Asp Arg Leu Arg Lys Val Ile Ala Pro Thr Leu Arg Ile
35 40 45

Asp Tyr Arg Ser Phe Leu Asp Lys Leu Trp Glu Ala Met Pro Ala Glu
50 55 60

Glu Phe Val Gly Met Val Ser Ser Lys Gln Met Leu Gly Asp Pro Thr
65 70 75 80

Leu Arg Thr Gln His Phe Ile Gly Gly Thr Arg Trp Glu Lys Val Ser
85 90 95

Glu Asp Glu Val Ile Gly Tyr His Gln Leu Arg Val Pro His Gln Arg
100 105 110

Tyr Lys Asp Thr Thr Met Lys Glu Val Thr Met Lys Gly His Ala His
115 120 125

Ser Ala Asn Leu His Trp Tyr Lys Lys Ile Asp Gly Val Trp Lys Phe
130 135 140

Ala Gly Leu Lys Pro Asp Ile Arg Trp Gly Glu Phe Asp Phe Asp Arg
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Ile Phe Glu Asp Gly Arg Glu Thr Phe Gly Asp Lys
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 <213> *Pyricularia oryzae*

<220>
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ctg ggc ctc atg act tgc gtc tat gag tgg gca gac agc tac gac tcc 96
 Leu Gly Leu Met Thr Cys Val Tyr Glu Trp Ala Asp Ser Tyr Asp Ser
 20 25 30

aag gac tgg gat agg ctg cga aag gtc att gcg cct act ctg cgc att 144
 Lys Asp Trp Asp Arg Leu Arg Lys Val Ile Ala Pro Thr Leu Arg Ile
 35 40 45

gac tac cgc tcc ttc ctc gac aag ctc tgg gag gca atg ccg gcc gag 192
 Asp Tyr Arg Ser Phe Leu Asp Lys Leu Trp Glu Ala Met Pro Ala Glu
 50 55 60

gag ttc gtc ggc atg gtc tgc agc aag cag gtg ctg ggc gac ccc acc 240
 Glu Phe Val Gly Met Val Ser Ser Lys Gln Val Leu Gly Asp Pro Thr
 65 70 75 80

ctc cgc acg cag cac ttc atc ggc ggc acg cgc tgg gag aag gtg tcc 288
 Leu Arg Thr Gln His Phe Ile Gly Gly Thr Arg Trp Glu Lys Val Ser
 85 90 95

gag gac gag gtc atc ggc tac cac cag ctg cgc gtc ccg cac cag agg 336
 Glu Asp Glu Val Ile Gly Tyr His Gln Leu Arg Val Pro His Gln Arg
 100 105 110

tac aag gac acc acc atg aag gag gtc acc atg aag ggc cac gcc cac 384
 Tyr Lys Asp Thr Thr Met Lys Glu Val Thr Met Lys Gly His Ala His
 115 120 125

tgc gca aac ctt cac tgg tac aag aag atc gac ggc gtc tgg aag ttc 432
 Ser Ala Asn Leu His Trp Tyr Lys Lys Ile Asp Gly Val Trp Lys Phe
 130 135 140

gcc ggc ctc aag ccc gat atc cgc tgg ggc gag ttc gac ttt gac agg 480
 Ala Gly Leu Lys Pro Asp Ile Arg Trp Gly Glu Phe Asp Phe Asp Arg
 145 150 155 160

atc ttt gag gac gga cgg gag acc ttt ggc gac aaa 516
 Ile Phe Glu Asp Gly Arg Glu Thr Phe Gly Asp Lys
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<210> 4

<211> 172
<212> PRT
<213> Pyricularia oryzae

<400> 4
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20 25 30
Lys Asp Trp Asp Arg Leu Arg Lys Val Ile Ala Pro Thr Leu Arg Ile
35 40 45
Asp Tyr Arg Ser Phe Leu Asp Lys Leu Trp Glu Ala Met Pro Ala Glu
50 55 60
Glu Phe Val Gly Met Val Ser Ser Lys Gln Val Leu Gly Asp Pro Thr
65 70 75 80
Leu Arg Thr Gln His Phe Ile Gly Gly Thr Arg Trp Glu Lys Val Ser
85 90 95
Glu Asp Glu Val Ile Gly Tyr His Gln Leu Arg Val Pro His Gln Arg
100 105 110
Tyr Lys Asp Thr Thr Met Lys Glu Val Thr Met Lys Gly His Ala His
115 120 125
Ser Ala Asn Leu His Trp Tyr Lys Lys Ile Asp Gly Val Trp Lys Phe
130 135 140
Ala Gly Leu Lys Pro Asp Ile Arg Trp Gly Glu Phe Asp Phe Asp Arg
145 150 155 160
Ile Phe Glu Asp Gly Arg Glu Thr Phe Gly Asp Lys
165 170

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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: chemically synthesized primer

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<210> 6
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized primer

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22

<210> 7

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized primer

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<211> 21

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: chemically synthesized primer

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<210> 9

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: chemically synthesized primer

<400> 9

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<210> 10

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: chemically synthesized primer

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20

<210> 11

<211> 37

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: chemically synthesized primer

<400> 11

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<210> 12

<211> 27

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: chemically synthesized primer

<400> 12

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<210> 13

<211> 600

<212> DNA

<213> *Pyricularia oryzae*

<400> 13

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ggtacaagaa gatcgacggc gtctggaagt tcgccggcct caagcccgat atccgctggg 540
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<210> 14

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<212> DNA

<213> *Pyricularia oryzae*

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cagctacgac tccaaggact gggataggct gcgaaaggctc attgcgccta ctctgcgcat	180
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cggcacgcgc tgggagaagg tgtccgagga cgaggatcgc ggctaccacc agctgcgcgt	360
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ctcggcaaac cttcactggc acaagaagat cgacggcgctc tggaaagtgc ccggcctcaa	480
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<210> 15
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 <212> DNA
 <213> *Pyricularia oryzae*

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gactccaagg actgggatag gctgcgaaag gtcattgcgc ctactctgcg cattgactac	180
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cagaggtaca aggacaccac catgaaggag gtcaccatga agggccacgc ccactcggca	420
aaccttcact ggtacaagaa gatcgacggc gtctggaagt tcgccggcct caagcccgcac	480
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<210> 16
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 <213> *Pyricularia oryzae*

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<210> 17
 <211> 732
 <212> DNA
 <213> *Pyricularia oryzae*

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tcggcaaacc ttactggta caagaagatc gacggcgtct ggaagtctgc cggcctcaag	660
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tttggcgaca aa	732

<210> 18
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 <212> DNA
 <213> *Pyricularia oryzae*

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atagcgggtga agccaccaac gacagtaccg ctgaccctaa ttcccctcca gactacctgg 180
gcctcatgac ttgcgtctat gagtgggcag acagctacga ctccaaggac tgggataggc 240
tgcgaaaggt cattgcgcct actctgcgcg tatgttccgc cctgccatgt ttatttttac 300
tttcccacac caaatccaga ctttaacagc gacgaccaa aaaaaaaaaa acagattgac 360
taccgctcct tctcgcaca gctctgggag gcaatgccgg ccgaggagtt cgtcggcatg 420
gtctcgagca agcaggtgct gggcgacccc accctccgca cgcagcactt catcggcggc 480
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gcaaaccctt actggtacaa gaagatcgac ggcgtctgga agttcgccgg cctcaagccc 660
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ggcgacaaa 729

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<210> 19
<211> 33
<212> PRT
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic peptide derived from
        Pyricularia oryzae

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<400> 19

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Ile Arg Leu Val Lys Ala Ala Asn Met Gly Ser Gln Val Gln Lys Ser
          20           25           30

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Asp

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